[Complain to them, not me; I'm just the messenger]

This is the Australian National Amateur Radio Teleprinter Society with our weekly Rtty broadcast. We transmit on the following frequencies and times :

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  3.545 MHz (Plus/minus 5)   0930 UTC     VK2CTD (COL)
  7.045 MHz  -3              0030 UTC     VK2CTD (COL)
 14.070 MHz (amtor/fec)      0030 UTC     VK2DPM (ALAN)
 14.091 MHz                  0030 UTC     VK2DPM (ALAN)
146.675 MHz             0030/0930 UTC     VK2JPA (PAT)
144.850 MHz (ax25 bbs)                    VK2JPA AT VK2WI
146.675 MHz (rtty mmbbs/repeater)         VK2RTY

        INTERNET         RADIO-INFO-DIST AT UCSD.EDU
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Enquiries to the society should be addressed to the Secretary ANARTS, PO Box 860, Crows Nest, NSW 2065 accompanied by s.a.s.e., or to VK2JPA at VK2WI.

Views expressed in this news bulletin are not necessarily those of the Broadcast Officer, the Relay Officers, or of the Society.

A.N.A.R.T.S. News Bulletin 950 16 March 1997

COLS COLUMN

WE RETURN AGAIN TO THE SERIES ON EARLY COMMUNICATIONS AND CONTINUE WITH JOSEPH HENRY.

HENRY'S WORK ON INDUCTION AND SELF-INDUCTION IS REMARKABLY SIMILAR TO THAT OF FARADAY. HE CONSTRUCTED A NUMBER OF LARGE ELECTROMAGNETS TO STUDY THEIR PROPERTIES. HENRY WAS NOT A DREAMY PHILOSPHER, HE WAS ALWAYS WATCHING FOR PRACTICAL APPLICATIONS FOR HIS PRINCIPLES. HE CONSTRUCTED WHAT MIGHT BE FAIRLY DESCRIBED AS THE FIRST ELECTRIC MOTOR WITH THE EQUI-VALENT OF AN ARMATURE AND COMMUTATOR. IN 1831 HE SAID 'I HAVE LATELY SUCCEEDED IN PRODUCING MOTION IN A LITTLE MACHINE BY A POWER WHICH I BELIEVE HAS NEVER BEFORE BEEN APPLIED IN MECHANICS, BY MAGNETIC ATTRACTION AND REPULSION.

AN IRON BAR ABOUT 1 FOOT LONG WAS PIVOTED AT ITS CENTRE. TWO SEPARATE COILS OF WIRE, INSULATED FROM EACH OTHER, WERE WOUND IN OPPOSITE SENSES, ONE ON EACH END OF THE BAR. THE WIRES WERE BROUGHT AWAY FROM THE BAR SO AS TO CAUSE NO PHYSICAL CONTACT WHEN THE BAR MOVED. EACH COIL HAD ITS OWN BATTERY CONSISTING OF A COPPER AND ZINES PLATES IMMERSED IN DILUTE ACID, THEY WERE ALSO PLACED ONE AT EACH END OF THE BAR. BRASS THIMBLES WERE SOLDERED TO THE POSITIVE AND NEGATIVE PLATES OF EACH BATTERY AND FILLED WITH MERCURY.

THE ENDS OF THE WIRES WERE JUST ABOVE THE THIMBLES. WHEN THE BAR WAS TILTED, THE WIRES ON THE LOWER END OF THE BAR DIPPED INTO THE MERCURY AND THE BAR WAS MAGNETISED. TWO PERMANENT MAGNETS WERE POSITIONED VERTICALLY BENEATH THE ENDS OF THE BAR, BOTH HAVING THEIR NORTH POLES UPWARD FACING THE BAR. THE WINDINGS OF THE COILS WERE SO ARRANGED THAT AS THE BAR DIPPED IN ONE DIRECTION IT WAS MAGNETISED WITH THE SAME POLARITY AS THE PERMANENT MAGNET AND WAS REPELLED AMD MOVED UPWARDS BREAKING THE CONNECTION TO THE BATTERY.

THE MOVEMENT WAS ENOUGH TO DIP THE WIRES AT THE OTHER END OF

THE BAR INTO THE MERCURY BENEATH THEM AND SO WAS ALSO MAGNETISED AND AS THE BAR REACHED THE PERMANENT MAGNET WAS REPELLED IN ITS TURN. THIS PROCESS REPEATED CONTINUOUSLY UNTIL THE BATTERIES WERE DEAD. THE BAR RECIPROCATED AT ABOUT SEVENTY FIVE TIMES PER MINUTE. THIS 'MACHINE' IS REMINISCENT OF THE EARLY STEAM ENGINES WITH ITS ROCKING BEAM.

THE ELECTRIC MOTOR WAS NOT OF PRACTICAL USE UNTIL 1834 WHEN MOTORS WERE CONSTRUCTED USING A ROTARY ACTION. HENRY HIMSELF KNEW THIS AND HE SAID 'NOT MUCH IMPORTANCE, IS ATTACHED TO THE INVENTION, SINCE THE ARTICLE, IN ITS PRESENT STATE, CAN ONLY BE CONSIDERED A PHILOSOPHICAL TOY, ALTHOUGH IN THE PROGRESS OF DISCOVERY AND INVENTION IT IS NOT IMPOSSIBLE THAT THE SAME PRINCIPLE, OR SOME MODIFICATION OF IT ON A MORE EXTENDED SCALE MAY HEREAFTER BE APPLIED TO SOME USEFUL PURPOSE'.

THE PROPHESY IN THE LAST FEW WORDS HAS BEEN FULFILLED BEYOND HENRY'S DREAMS. THE ROCKING BAR HAS BECOME THE ARMATURE AND THE WIRES DIPPING INTO MERCURY HAVE BECOME THE COMMUTATOR IN A MODERN ELECTRIC MOTOR. THE ELECTRIC MOTOR HAS PLAYED AS GREAT A PART IN TWENTIETH CENTURY TECHNOLOGY AS DID THE STEAM ENGINE IN THE INDUSTRIAL REVOLUTION. IN THE NEXT EPISODE, WE CONTINUE WITH JOSEPH HENRY, I DID WARN YOU THAT HIS WAS A LONG STORY.

73S FOR NOW DE COL VK2CTD.

-+- BARTG SPRING RTTY CONTEST -+-
Sponsored by British Amateur Radio Teledata Group.
Third full weekend in March (Ref: BARTG, G4SKA)

Contest Period: From 0200Z Saturday to 0200Z Monday (48 hours) Maximum operating time allowed: 30 hours for single op and SWL entries. Multi-operator stations may operate the full 48 hours. The 18 hours of rest periods may not be less than 3 hours each.

MODE: RTTY only

BANDS: 80, 40, 20, 15, and 10M

CATEGORIES: 1) Single op, all band
2) Single op, single band
3) Multi-op, all band
4) Multi-op, Multi-transmitter
5) Short Wave Listener

NOTE: Categories 1, 2, and 3 may not transmit on two or more bands at the same time. No station may enter more than one category.

EXCHANGE: Send: RST + QSO number + Time in UTC.

MULTIPLIERS:

"NOTE:" (((Starting in '97, JA 0 thru 9 call areas are now included as additional multipliers.)))

Each DXCC country, including first QSO with W, VE, VK and JA will counts as a multiplier on each band. Each call district in W, VE, VK and JA will count as an additional multliplier on each band. Also, each continent (6) will count once, not once per band.

QSO POINTS: Count 1 point per QSO. Same station may be worked on other bands. Duplicate contacts on same band receive zero points and must be clearly marked in the log.

FINAL SCORE: Total QSOs x total multipliers x number of continents (max 6)

LOGS: Use separate logsheets for each band. Logs must show: BAND, DATE and TIME (UTC), CALLSIGN, MESSAGE Sent and Received, COUNTRIES and POINTS claimed. Summary sheet must show full scoring, times of operation, and address for correspondence. Include names and callsigns of all multi-op station operators. Computer generated logs containing all specified info are welcome.

DEADLINE: Logs must be received by May 31 to qualify.
Mail logs to:

JOHN BARBER G4SKA
PO BOX 8
TIVERTON, DEVON
EX16 5YU, ENGLAND

AWARDS: Certificates will be awarded to the top 3 stations in each category, the top 5 single operators in each continent, and to the top single operator in each W/VE/VK call area. Your comments would be much appreciated. Please include them with your log.

IPS WEEKLY SOLAR AND GEOPHYSICAL REPORT
(07 MARCH - 13 MARCH)

ISSUED ON 14 MARCH 1997

SUMMARY

Date	07	08	09	10	11	12	13
10cm	74	75	75	75	74	74	74
A	9	5	2	2	3	16 (10 ESTIMATED)	
T	14	13	18	20	7	20	11

SOLAR ACTIVITY WAS VERY LOW ALL WEEK.

THE GEOMAGNETIC FIELD AT LEARMONTH, W.A. WAS QUIET OR QUIET TO UNSETTLED DURING THE PERIOD, EXCEPT FOR 12 MARCH WHEN THE FIELD WAS UNSETTLED TO ACTIVE.

FREQUENCIES WERE NEAR MOSTLY NEAR PREDICTED MONTHLY VALUES WITH DEPRESSED PERIODS TO 15 PER CENT ON 8TH AND 13TH MARCH, AND ENHANCED TO 40 PER CENT 0700 TO 1500 UT ON 12TH. SPREAD F WAS PRESENT ON 8TH AND 9TH MARCH DURING LOCAL NIGHT.

FORECAST (14 MARCH - 20 MARCH)

SOLAR: VERY LOW

GEOMAGNETIC: QUIET ON 14TH, THEN A GRADUAL INCREASE IN GEOMAGNETIC ACTIVITY IS EXPECTED, WITH ACTIVE LEVELS, (POSSIBLE MINOR STORM PERIODS) EXPECTED ON 16 MARCH. THE FIELD IS THEN EXPECTED TO RETURN TO QUIET LEVELS UNTIL 21 MARCH WHEN ANOTHER MILD INCREASE IN ACTIVITY IS EXPECTED.

FREQUENCIES: INITIALLY, GOOD HF COMMS EXPECTED. DEGRADED CONDITIONS EXPECTED FOR MID TO HIGH LATITUDES DURING 16-17 MARCH, IN ASSOCIATION WITH GEOMAGNETIC ACTIVITY.

COURTESY OF IPS RADIO AND SPACE SERVICES

RTDX0307 RTTY DX

VK2SG RTTY DXNOTES FOR WEEKENDING 7 MARCH 97 (BID RTDX0307)

Our information this week came from: AA5AU, DJ3IW and the Central-Europe DX Cluster node DB0SPC, I5FLN and the IK5PWJ Packet Cluster, KB8NW AND THE OPDX Bulletin, ON6RO, SP9UNX, W2JGR and the NJ0M node the Twin-Cities DX Packet Cluster W5KSI, W5ZPA, WS7I, WX5L and ZS5S.

Thank you all for your assistance.

Bandpass
Friday 28
0825-14084 P29VXX
1322-14850 4Z4DX
1341-14082 VU2MTT
1452-14082 8P9JA
1637-14083 J75T
1715-14085 JX7DFA See Notes
1734-14085 IS0IGV
1850-14083 EA9JZ
2047-14085 9Q5PA
2201-14085 JA1RZD
2226-14081 P29VXX
2318-14088 JA1JDD
2330-14087 JA3AUQ
2340-14087 PJ2HB

Saturday 1
0121-14082 BE4DH
0720-14086 4Z5AO
0930-14082 P29VXX
1004-14085 ER1LW
1407-14087 JX7DFA
1457-14089 4Z4DX
1636-14089 4Z4DX
1645-14086 GI4WXA
1649-14086 4Z4DX
1746-14083 9Q5PA
2349-14084 VP8CKN

Sunday 2
0726-14083 P29VXX
0730-14085 9Q5PA
0731-14083 P29VXX
0823-14086 FK8FI
0908-14085 P29VXX
1013-14084 P29VXX
1116-21087 7Q7EH
1116-14081 EK6OCM
1123-14075 EZ8AI
1145-14085 3Z3GD QSL SP2FOV Special call celebrating 1000 years of Gdansk

1421-14079 VU2OXX
1541-14088 OY4TN
1542-14083 HK3SGP
1550-14084 YB5NOF/8
1607-21084 3B8CF
1608-14084 3B8CF
1647-14083 HK3SGP
1653-14089 4Z4DX
1659-14088 UX1CN
1756-14086 UR5EDU
2019-14086 FG5GG
2143-14079 HH2LE QSL Box 2523, Port au Prince, Hati

Monday 3
0754-14086 4Z4DX
1315-14085 RN3QO
1315-14081 8P9JB
1359-14085 RZ3AZ
1402-14089 YL1XX
1602-14085 4X6UO
1612-14082 OD5NJ
1703-14084 JX7DFA
1724-14081 WP4Q
1916-14086 7Q7EH
1940-14085 7Q7EH

Tuesday 4
1133-14083 8P9JA
1147-14068 9K2EC
1317-14082 RN3QO
1354-14086 RA3BT
1412-14083 YB5QZ
1423-14080 VE8RCS
1439-14085 YB5QZ
1449-14080 V85GA
1602-14085 XT2DP
1609-14086 4Z5AO
1625-14083 8P9JB
1759-14090 WP4Q
1818-14086 HH2LE
1824-14089 HH2LE
1826-14090 EA9JZ
1956-14086 7Q7EH

Wednesday 5
0710-14082 OD5NJ
1321-14084 RX6AHF
1324-14087 UN5PR
1350-14086 TF3GC
1549-14086 ES7FQ
1720-14085 JX7DFA
1801-14088 C91AI
2346-14082 VK3AMK

Thursday 6
1315-14088 GM4UIB
1317-14081 RN3QO
1319-14086 RA1WU
1319-14087 UN5PR

NOTES OF INTEREST:

YEMEN, 70. Questions have been asked about the status of the

7O1A operation from Aden, Yeman. ARRL HQ has been in communications, resulting in the following information. The ministry of Communications in Sana'a, capital of Yeman, has advised us by both fax and telephone that while it is aware of a document issued by its Aden office, the ministry of Communications in Sana'a, as the main body responsible for communications, had never issued an official authorization for Amateur Radio. In accordance with this communication, the 7O1A operation cannot be accepted for DXCC credit.

JAN MAYEN, JX. Per, JX7DFA, has been active on the low bands working stateside RTTY. Look for him 14085 around 1700z. QSL via his home call LA7DFA and they will be answered on his return to Norway in late April.

The VK2SG RTTY DX NOTES are also available on the Internet at reflector <digital-dx at st.rim.or.jp>. Check also the OH2BUA Webcluster at
URL <http://www.clinet.fi/jukka/webcluster.html>.

For next week's bulletin send your bandpass to
Jules, W2JGR at W5KSI.(hashsign)NOLA.LA.USA.NA
or e-mail: w2jgr at millcomm.com

REMEMBER, DX DON'T SLEEP.
GL DE BOB, WB2CJL at W5KSI.(hashsign)NOLA.LA.USA.NA
or e-mail: wb2cjl at .com

Society information

The Society may be contacted at : PO Box 860, Crows Nest 2065 Australia, for such matters as membership and general enquiries. Enquiries can also be made by packet to the President (Col) VK2CTD at VK2WI, or the Secretary (Pat) VK2JPA at VK2WI.

Email addresses :
Broadcast Officer : patl@pitt.conmusic.su.oz.au
or patl@extro.ucc.su.oz.au

President : colin.davies@dse.com.au
or cdavies@sunink.com

73s de Pat VK2JPA Broadcast Officer
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Dave Horsfall (VK2KFU) | dave@esi.com.au | VK2KFU @ VK2KFU.NSW.AUS.OC | PGP 2.6
Opinions expressed are mine. | D8 15 71 F9 26 C8 63 40 5E 63 5C 65 FC A0 22 99